

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of

Jong Jin Park et al.

Application No.: 10/814,264

Filed: April 1, 2004

For: PHOTSENSITIVE SEMICONDUCTOR)
NANOCRYSTALS, PHOTSENSITIVE)
COMPOSITION COMPRISING)
SEMICONDUCTOR NANOCRYSTALS)
AND METHOD FOR FORMING)
SEMICONDUCTOR NANOCRYSTAL)
PATTERN USING THE SAME)

Group Art Unit:

Examiner:

Confirmation No.: 8445

PETITION TO ACCEPT COLOR DRAWINGS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.84(a)(2) and (b)(2), Applicant(s) hereby petitions for acceptance of the color drawings enclosed herewith as formal drawings for inclusion in the above-cited application. Triplicates of color drawings for each color drawing are provided. The color drawings are necessary for a complete understanding of the present invention. Entry of these drawings pursuant to 37 C.F.R. § 1.84 is respectfully requested. Should the enclosed drawings require changes, it is respectfully requested that the U.S. Patent and Trademark Office notify the undersigned of same. The specification contains a statement as the first paragraph of the Brief Description of the Drawings alerting the reader to color drawings associated with the above-indicated application.

The Petition fee of \$130.00 (1464) is enclosed herewith. The Director is hereby authorized to charge any additional fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, or to credit any overpayment, to Deposit Account No. 02-4800.

04/08/2005 JADD01 00000071 10814264

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Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: April 7, 2005

By: 

Charles F. Wieland III

Registration No. 33,096



Patent
Attorney Docket No. 021269-013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Jong Jin Park et al.

Application No.: 10/814,264

Filing Date: April 1, 2004

Title: PHOTSENSITIVE SEMICONDUCTOR NANOCRYSTALS, PHOTSENSITIVE COMPOSITION
COMPRISING SEMICONDUCTOR NANOCRYSTALS AND METHOD FOR FORMING
SEMICONDUCTOR NANOCRYSTAL PATTERN USING THE SAME

ATTN: DRAFTING BRANCH

Allowed: N/A

Group Art Unit:

Examiner:

Confirmation No.: 8445

SUBMISSION OF DRAWINGS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed please find 4 sheet(s) of drawings for review by the Patent and Trademark Office.

Should the enclosed drawing(s) require changes, it is respectfully requested that the Patent and Trademark Office notify the undersigned of same.

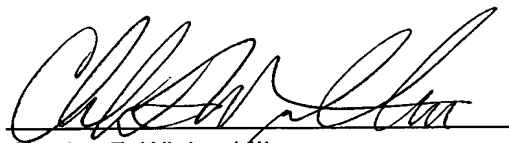
Respectfully submitted,

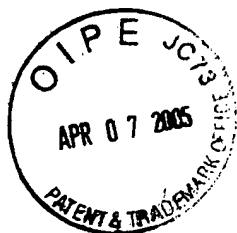
BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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(703) 836-6620

Date: April 7, 2005

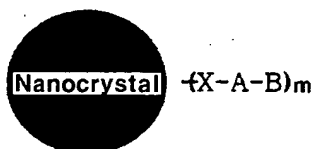
By


Charles F. Wieland III
Registration No. 33,096





FIGURES

Fig. 1



X : -COO-, -S-, -NH₂-, -CN-, etc.

A : -(CR₂)_n-, -(CR₂)_n-COO-, -(CR₂)_n-NHCO-, -(CR₂)_n-OCO-, -(CR₂)_n-O-,

 ,  , etc. [in which R is H, C₁₋₃ alkyl group, and n is 0, or an integer of 1 or more]



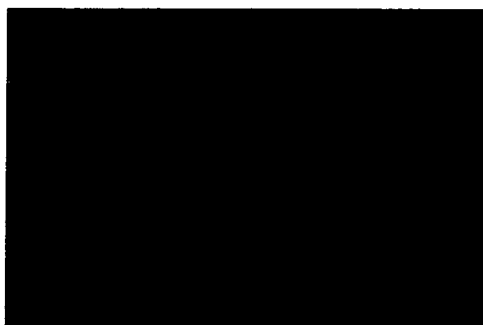
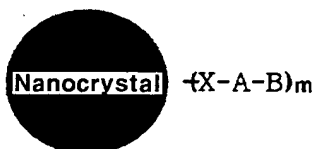
B : -CR₁=CR₂R₃ [in which R₁ is H, -COOH, C₁₋₃ alkyl group, halogen group, halogenated alkyl group, and R₂ and R₃ is independently H, C₁₋₃₀ alkyl group, -CN, -COOH, halogen group, unsaturated aliphatic hydrocarbon group having at least one carbon-carbon double bond,  ,  (wherein R' is halogen group, nitro group, hydroxy group, etc.), etc.]

Fig. 2





FIGURES

Fig. 1



X : -COO, -S, -NH₂, -CN, etc.

A : -(CR₂)_n-, -(CR₂)_n-COO-, -(CR₂)_n-NHCO-, -(CR₂)_n-OCO-, -(CR₂)_n-O-,

 ,  , etc. [in which R is H, C₁₋₃ alkyl group, and

n is 0, or an integer of 1 or more]



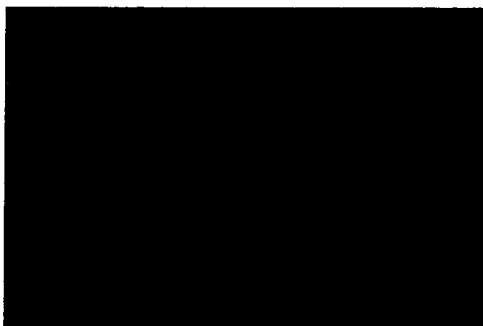
B : -CR₁=CR₂R₃ [in which R₁ is H, -COOH, C₁₋₃ alkyl group, halogen group, halogenated alkyl group, and R₂ and R₃ is independently H, C₁₋₃₀ alkyl group, -CN, -COOH, halogen group, unsaturated aliphatic hydrocarbon group having at least one carbon-carbon double bond,  ,  (wherein R' is halogen group, nitro group, hydroxy group, etc.), etc.]

Fig. 2



FIGURES



Fig. 1



Nanocrystal $-(X-A-B)_m$



X : $-\text{COO}$, $-\text{S}$, $-\text{NH}_2$, $-\text{CN}$, etc.

A : $-(\text{CR}_2)_n-$, $-(\text{CR}_2)_n-\text{COO}-$, $-(\text{CR}_2)_n-\text{NHCO}-$, $-(\text{CR}_2)_n-\text{OCO}-$, $-(\text{CR}_2)_n-\text{O}-$,

 ,  , etc. [in which R is H, C_{1-3} alkyl group, and

n is 0, or an integer of 1 or more]

B : $-\text{CR}_1=\text{CR}_2\text{R}_3$ [in which R_1 is H, $-\text{COOH}$, C_{1-3} alkyl group, halogen group, halogenated alkyl group, and R_2 and R_3 is independently H, C_{1-30} alkyl group, $-\text{CN}$, $-\text{COOH}$, halogen group, unsaturated aliphatic hydrocarbon group having

at least one carbon-carbon double bond,  ,  (wherein R'

is halogen group, nitro group, hydroxy group, etc.), etc.]

Fig. 2



Fig. 3

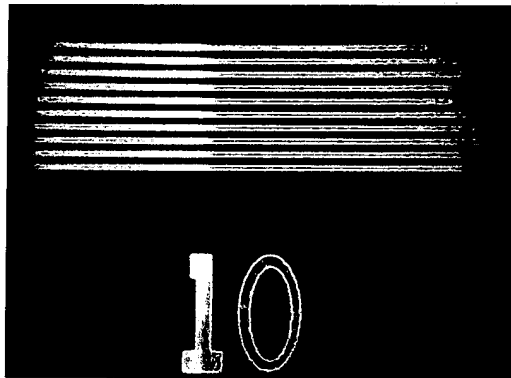


Fig. 4



Fig. 3

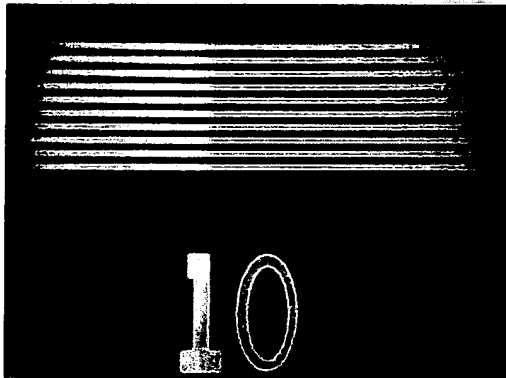


Fig. 4

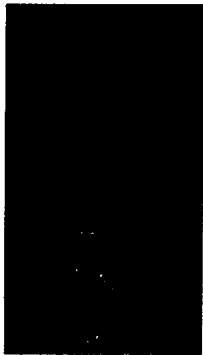


Fig. 3

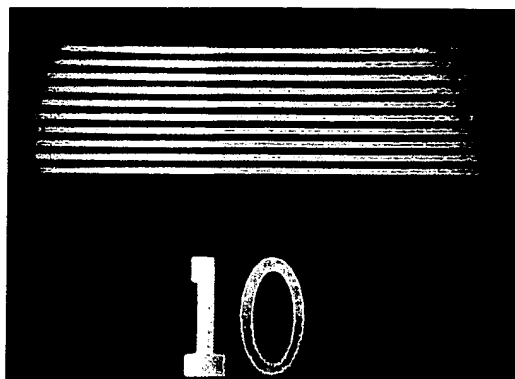


Fig. 4

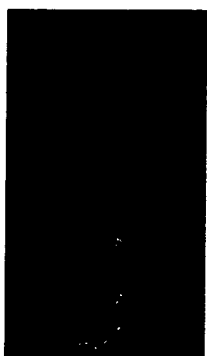


Fig. 5a

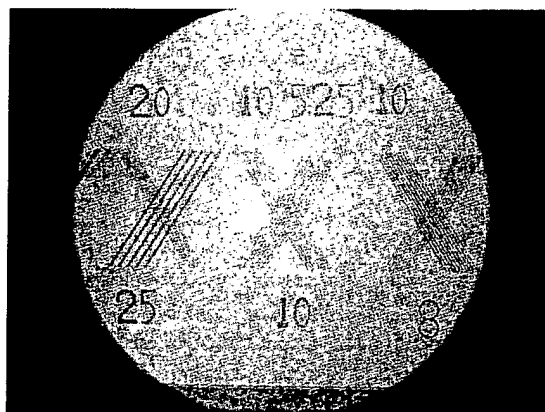
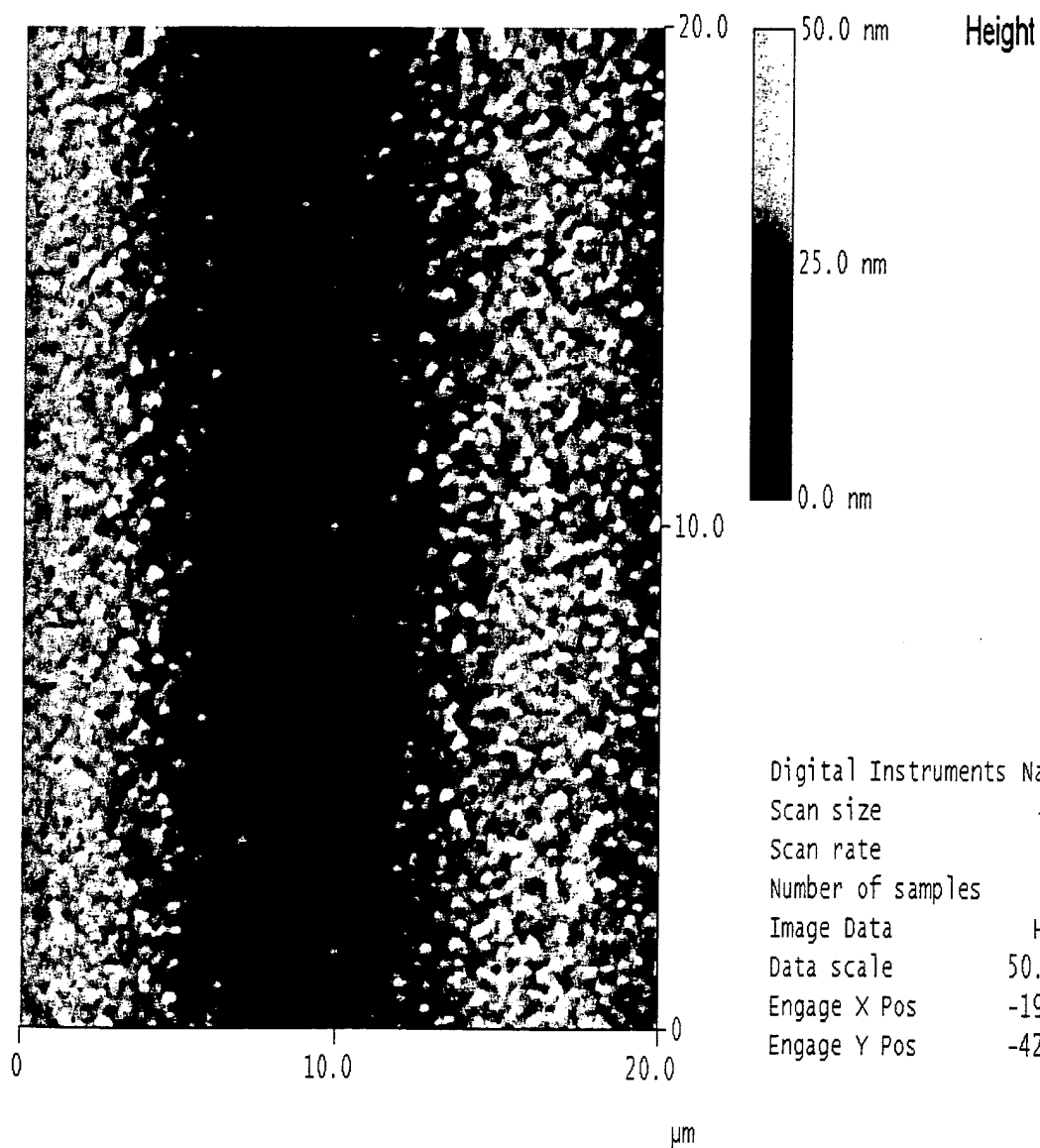


Fig. 5b



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Fig. 5a

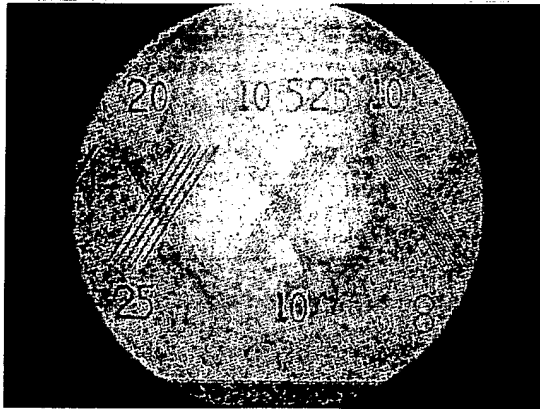


Fig. 5b

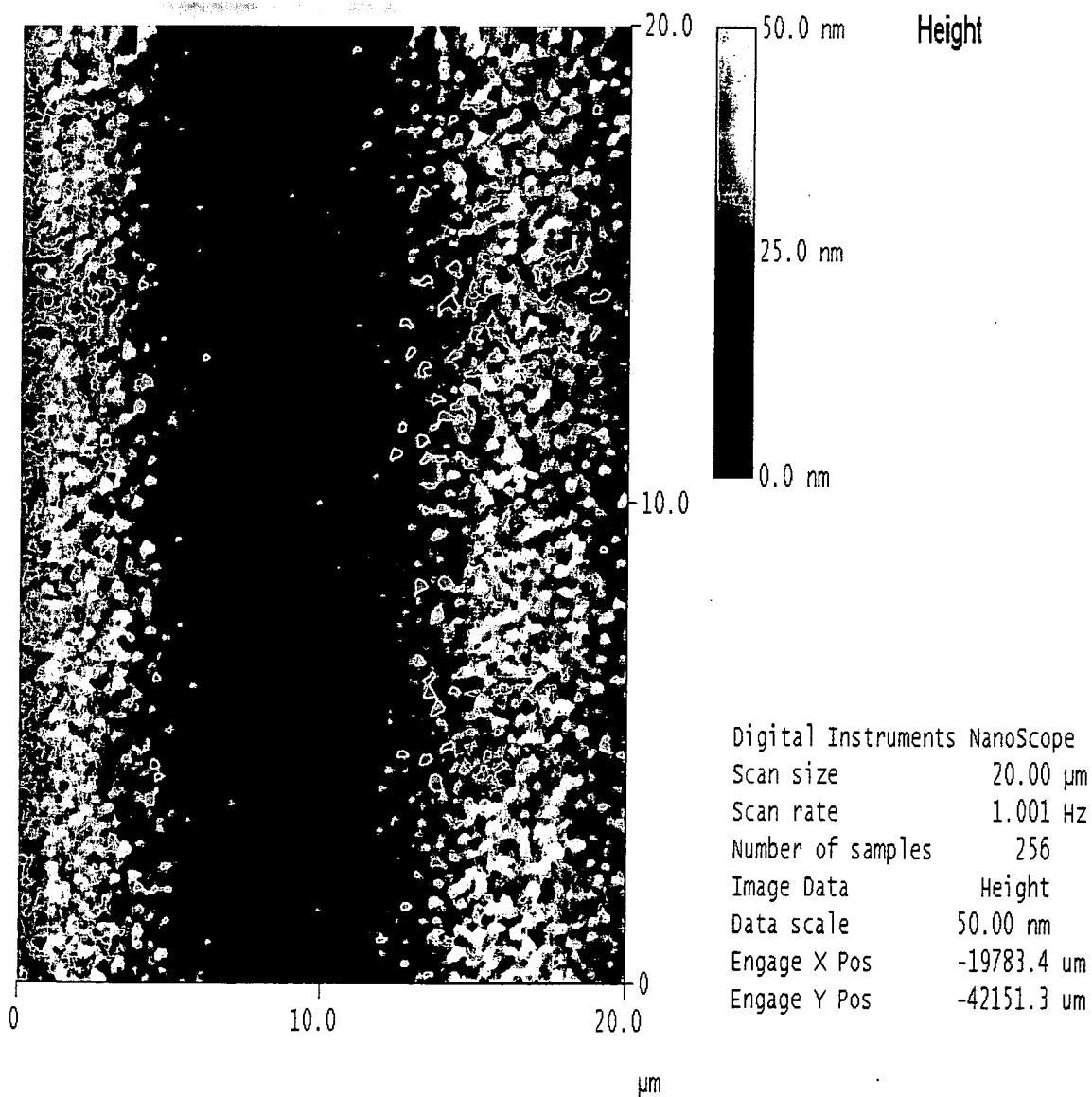


Fig. 5a

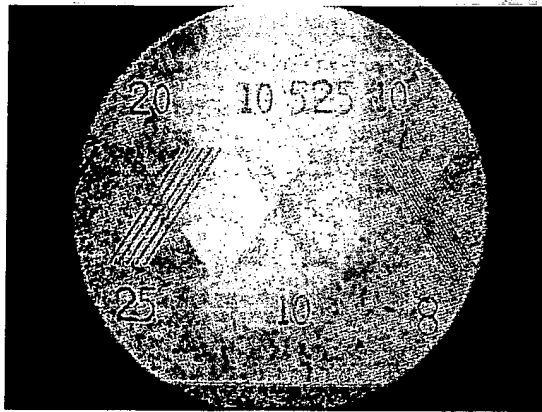


Fig. 5b

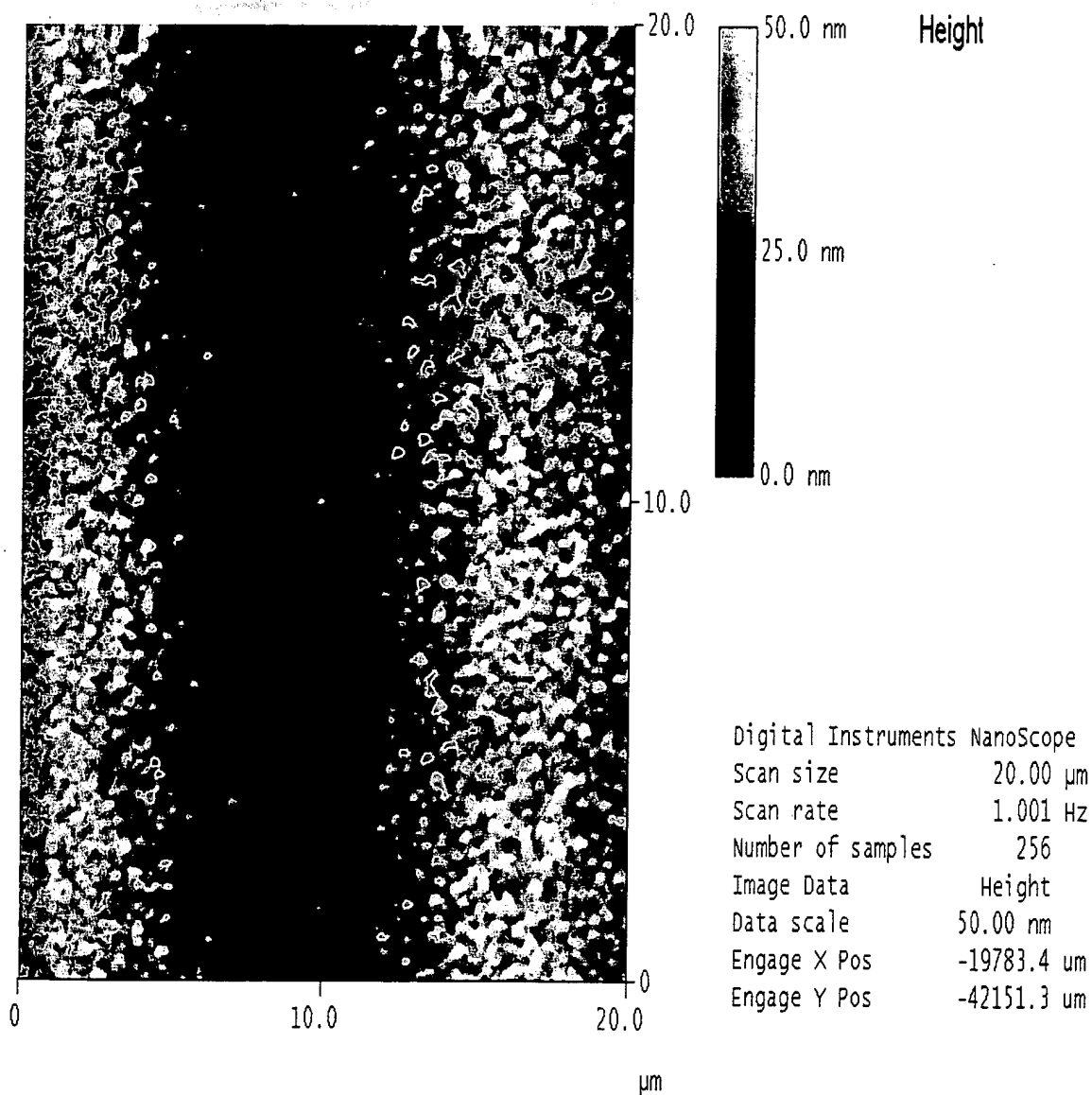


Fig. 6

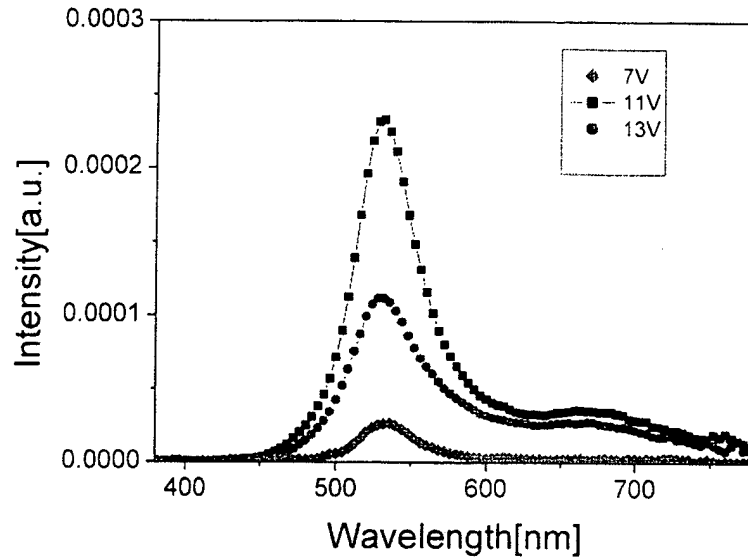


Fig. 6

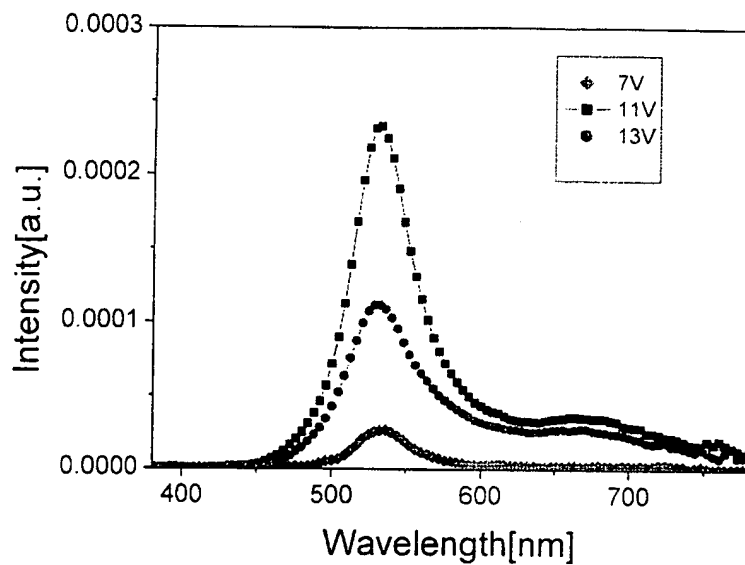
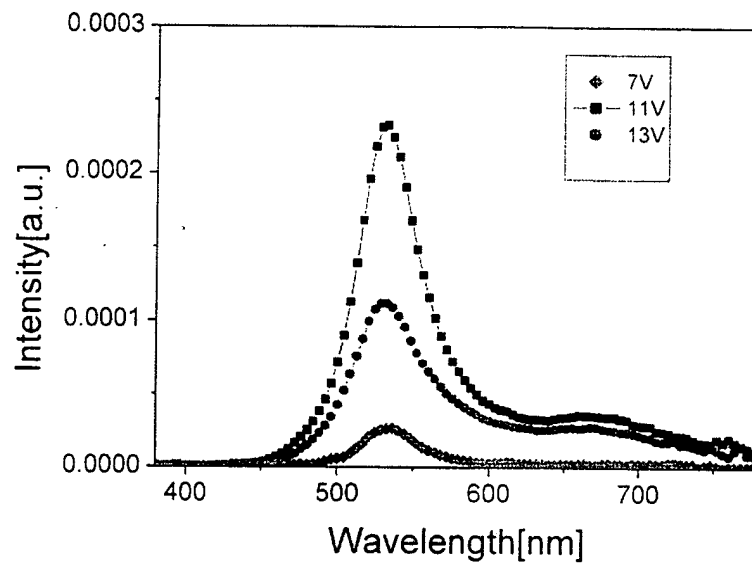


Fig. 6



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